ASSESSING ORACLE'S POSITION IN THE CASE MARKET

Final Report

Submitted to:

ORACLE

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INPUT

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Table of Contents

Exhibits

Exhibits cont.

Exhibits cont.

Exhibits cont.

I. INTRODUCTION

A. OBJECTIVE

The overall objective of this study has been to supply information to assist Oracle in positioning itself to be among the top five suppliers of CASE technology. This study provides information based on primary interview research in the following areas:

- Overall perceptions of Oracle CASE products
- Product visibility and coverage
- Assessments of Oracle CASE products
- The competitive position of Oracle CASE products

B. METHODOLOGY

INPUT interviewed a sample of the following types of organizations:

- Oracle CASE customers
- Oracle data base customers who are not already Oracle CASE customers; this group is the next logical set of Oracle CASE customers.
- Systems integration/professional services firms: since these can be both indirect channels of CASE product distribution and may be customer influencers
- Press/analysts/financial; these are also market influencers.

Interviews took place in February 1992. It was originally anticipated that Oracle would supply INPUT contact names in the two Oracle customer categories. Oracle was only able to supply a limited number of Oracle CASE customer names, so INPUT developed its own lists. Oracle and INPUT agreed on a list of target press and analysts.

The number of organizations interviewed in each category is shown in Exhibit I-1.

The types of people interviewed are shown in Exhibit 1-2. INPUT's objective was to interview people who were knowledgeable about the organization's CASE experience and plans. In general, this was a staff specialist in larger organizations and someone in a more general management role in smaller organizations, although there were numerous exceptions.

Respondents were frank, forthcoming and generally quite knowledgeable. As would be expected, current Oracle CASE customers had the most knowledge and opinions on Oracle CASE products.

INPUT has been able to supplement the information gained from these interviews from 1991 research conducted in the CASE market. Some of the actual data is cited in appropriate places in the report. Other information from prior studies has helped INPUT to evaluate the responses in the current study.

C. ORGANIZATION OF THE REPORT

This report examines the findings from each group of respondents in the following order:

- Oracle CASE users
- Oracle data base users
- Systems integrators/professional services firms
- Press and analysts

In each chapter, findings are divided into two main sections:

- General CASE issues
- Oracle CASE issues

Contrasts between the groups are made in each section as appropriate. There is also a summary section which pulls together more global findings and observations.

Exhibit I-1

INTERVIEW SAMPLE

Category	Number
Oracle CASE Users	19
Overall Data Base Users (Not users of Oracle CASE)	14
Systems Integrators/Professional Service Firms	10
Press/Analyst/Financial	13
Total	56

Exhibit I-2

TYPICAL TITLES OF INFORMATION SYSTEMS AND SYSTEMS INTEGRATOR RESPONDENTS

Assistant Director Computer Technology

Director of Computing

Director of Business Systems

President

Software Engineer

Sr. Section Manager

Vice President -- Corporate Systems

Information Resource Management Staff Consultant

Computer Specialist

Engineering Manager

Manager of Production

Assistant Director

Programming/Systems Coordinator

Data Base Administrator

Managing Consultant

Vice President

Application Development Manager

Sr. Vice President -- New Product Development

R & D Manager

II. ORACLE CASE USERS

A. GENERAL CASE ISSUES

Oracle CASE users have been moderate spenders on CASE technology so far, averaging under $100,000 on their CASE product spending to date, the vast majority of which has been for Oracle CASE products. (See Exhibit II-2).

Spending on CASE products over the next two years is foreseen to be in the same general range. Based on INPUT's prior research and knowledge there appear to be relative few "big spenders" among this group.

Short term expectations for a payoff from CASE are relatively restrained.

- Over one-third do not expect any payoff at all in the short term (Exhibit II-2)
- Short term expectations are fairly evenly divided between improvements in quality, speed and productivity.
- Looking at longer term expectations, there are stronger expectations in the previously cited areas, plus expectations for improved maintenance. Very few respondents were able to quantify their expectations, however.
- This pattern of increasing expectations is one that INPUT is familiar with from other studies.
    - In the short run this can be beneficial to CASE product vendors since customer evaluations are not rigorous.
    - Problems may occur after initial product installation, when the expected product benefits do not come. This can delay, sometimes indefinitely, additional product sales into an account. Since most Oracle CASE installations are relatively recent, it is too soon to say how significant this factor will be.

Respondents were asked to rate the importance to their operations of several technology-related issues (see Exhibit II-3).

- All the technology areas except object-oriented design received very high ratings.

- Integration with a relational DBMS scored highest, as might be expected given the sample.

- Support for multiple hardware platforms and client/server development platforms received almost as high a rating.

- Lower, but still quite high from an absolute standpoint, were client/server as a target platform and integrated re-engineering.

A very interesting finding, from Oracle's perspective, are the findings on perceived deficiencies of CASE products (Exhibit II-4). While this question did not specifically address Oracle CASE, the respondents generally were only knowledgeable about Oracle CASE, so their responses should be interpreted with that in mind.

- Over 40% could not cite any deficiency at all. This is considerably higher (i.e., more positive) than INPUT has found to be the case with the customer sets of other vendors.

- Product characteristics are cited by one-fifth of respondents.

- The general issue of integration was also cited by one-fifth of customers.

Another area where Oracle CASE customers tend to be unlike other vendors' customer sets is the fact that almost two-thirds did not consider other CASE vendors before selecting Oracle (Exhibit II-5). About one-quarter examined KnowledgeWare (the current industry leader). INPUT believes there are two primary reasons for this:

- Having made the commitment to Oracle in the first place, it was logical to extend this to Oracle CASE. (It is not clear, as will be discussed in the next chapter, whether this reasoning will apply to all Oracle data base customers.)

- A considerable number of Oracle CASE customers appear to have paid a relative small amount for Oracle CASE so far. Consequently, their level of commitment may also be relatively low.

B. ORACLE CASE ISSUES

Current Oracle CASE customers have overwhelmingly positive opinions toward Oracle CASE (see Exhibit II-6).

This is borne out by the fact that only 11% of companies interviewed would, given the advantages of hindsight, look at additional vendors if they were to perform their CASE selection process again. This is a much more positive response than INPUT has found when interviewing the customers of some other CASE product vendors.

As might be expected, compatibility with the existing computing environment was the most important factor in the CASE selection process (Exhibit II-8). Other important factors were the product's functional characteristics as well as how the product (and associated offerings) would lead to overall improvements in the applications development process.

Exhibit II-9 asked respondents to rate Oracle CASE in 17 specific areas. Oracle and Oracle CASE performed very well in practically every category. Those where Oracle scored somewhat lower should not be significant areas of concern at this time:

- "Price" should not be rated lower, since otherwise there is a danger of money being left on the table. In fact, similar data from companies which price their CASE products much high shows a relative insensitivity to price. For motivated CASE customers, price is rarely a primary concern.
- "Conformance to AD/Cycle" should be a long term concern, but only in the more general context as to how open Oracle wants to become.
- Similarly, "consulting/implementation assistance from other vendors" is a strategic issue for Oracle: To what extent would it be in Oracle's interest to form alliances with professional services/systems integration firms?

Exhibit II-10 contrasts Oracle CASE ratings with those obtained last year from a sample of KnowledgeWare customers. Overall, the ratings are remarkable similar. INPUT believes that this shows that Oracle can in fact credibly aim toward being among the top five CASE vendors. There should be several cautions about the KnowledgeWare data:

- This data was obtained by interviews in mid-1991, so it cannot be directly compared to February 1992 data.
- While INPUT believes that the KnowledgeWare situation is still generally the same, there have been several events which could result in different findings if the research were conducted today:

- -- The interviews were conducted before KnowledgeWare's bad third quarter 1991 results were announced.
- -- The interviews may not have taken into account the full impact of 1991 product introductions.

As Exhibit II-11 indicates, Oracle CASE users do not have a consensus on just what the key components of a successful CASE offering consist of.

- The positive news is that whatever their requirements, over half believe that Oracle CASE meets these requirements.
- INPUT believes that this situation should be monitored closely, however. With such a wide range of requirements, product planning and positioning may be hard-pressed to meet customer expectations in the longer run.

Oracle CASE users were specifically asked to cite Oracle CASE strengths and weaknesses. This produced the list shown in Exhibit II-12.

- No particular strength or weakness emerged. In fact, some points, such as ease of use or documentation, appear as both strengths and weaknesses.
- There was no attempt made to weight these observations. In INPUT's opinion, these citations should not be overemphasized. INPUT would place at least as much weight on the findings in Exhibit II-4, which shows considerable comfort with the Oracle CASE offering.
- If there is any cause for concern, it is over a more subtle point: The extent of long-term allegiance to the Oracle CASE product. The lack of concern over product defects could also ultimately mean that Oracle CASE would not be part of a firm's strategic direction.

Over two-thirds of respondents felt that Oracle was prioritizing Oracle CASE appropriately relative to Oracle's other products (Exhibit II-13).

The only area where Oracle CASE customers gave Oracle a relatively low grade was on the issue of their confidence in Oracle's ability to meet its deliverables schedule (Exhibit II-14).

- While the overall score was "average" respondents tended to be either positive or negative. Both groups cited their previous experience.
- There was an indication by some respondents that their attitude toward Oracle CASE products was influenced by their experience with Oracle data base products. In the real world this is often the situation and one that Oracle CASE may have to live with.

C. SUMMARY OF ORACLE CASE CUSTOMER FINDINGS

The broad level of findings is similar to that found when interviewing CASE users in general. However, there are exceptions which could help Oracle CASE position itself:

- So far, investment levels are relatively low. Oracle should review both its pricing strategy as well as obtaining a more complete understanding of its customers' overall level of commitment.
- Oracle CASE customers are generally satisfied customers.
- Oracle compares well to the industry leader, KnowledgeWare.

Exhibit II-1

CASE PRODUCT INVESTMENT BY ORACLE CASE USERS

	Mean	Median	Range
Average to Date	$90,000	$50,000	0 to $400,000
Average Planned over Next Two Years	$70,000	$40,000	0 to $175,000

Exhibit II-2

PAYOFF EXPECTED FROM CASE: ORACLE CASE USERS

	Percent of Respondents	
Payoff	Short Term	Long Term
Improved Quality	16	32
Increased Speed	16	32
Improved Maintenance	5	26
Productivity/Cost Savings	21	21
Improved Documentation	11	11
Other (e.g. Analysis, Repository integration)	5	11
None expected	37	0

Multiple responses; totals more than 100%
Open-ended question; coded

Exhibit II-3

IMPORTANCE OF CASE PRODUCT CAPABILITIES: RATED BY ORACLE CASE USERS

Capability	Rating
Integration with Relational DBMS	1.2
Support for Multiple Hardware Platforms	1.4
Client/Server-Development Platform	1.8
Client/Server-Target Platform	2.1
Integrated Re-engineering	2.1
Object-oriented Design	3.0

1= Very Important 5= Not Important at All

Meaningful differences are those 0.5 and larger

Exhibit II-4

CASE PRODUCT DEFICIENCIES (NON-VENDOR SPECIFIC) AS SEEN BY ORACLE CASE USERS

Deficiency	Percent of Respondents
None cited	42
Integration	21
Product features (front end, back end)	21
Other (e.g., cost, support complex systems, metrics/planning, hardware efficiency)	21

Open-ended question; coded
Multiple responses; totals more than 100%

Exhibit II-5

OTHER VENDORS CONSIDERED BY ORACLE CASE USERS

Vendor	Percent of Respondents
None considered	63
KnowledgeWare	26
Texas Instruments	11
Index	11
Others	11

Multiple responses, totals more than 100%

Exhibit II-6

OPINIONS ON ORACLE'S CASE PRODUCTS (ORACLE CASE USERS)

Opinion	Percent of Respondents
Positive	90
Negative	0
Mixed/Don't Know	10
	100

Quotes (Illustrative)

"Comprehensive"

"Adequate"

"Good"

"Decent"

"Worthwhile"

"High"

"Excellent"

"Expensive"

"One of best"

"Very good"

Open-ended question; coded

Exhibit II-7

SATISFACTION WITH THEIR OWN CASE PRODUCT SELECTION PROCESS:

ORACLE CASE USERS

		Percent of Respondents
Would not make changes		58
Would make changes		42
- Deeper evaluations	31%	
- Look at additional vendors	11%	
		100

Open-ended question; coded

Exhibit II-8

FACTORS CONSIDERED IN PRODUCT SELECTION PROCESS: ORACLE CASE USERS

Factor	Percent of Respondents
Compatibility	53
Process Improvement (methodology, control)	32
Tool Functionality	32
Productivity/Speed of Product	21
Ease of Use	11
Don't know (consultant selected)	5

Multiple responses; totals more than 100%
Open-ended question; coded

Exhibit II-9

ORACLE CASE RATINGS BY USERS

	Rating*
Long term viability of vendor	1.8
Product integration (future)	1.9
Methodology support by product	1.9
Current product features/ functions	2.1
Future product features/ functions	2.1
Product integration (current)	2.2
Consulting/implementation assistance supplied by product vendor	2.2
Vendor Reputation	2.3
References from current users	2.4
Conformance to other standards	2.4
Training offered by vendor	2.5
Ease of use	2.5
Effectiveness of sales process	2.5
Ease of learning product	2.6
Price	2.9
Conformance to AD/Cycle	3.3
Consulting/implementation assistance available from other vendors	3.4

*1 = excellent, 5 = poor
Meaningful differences are 0.5 or larger

Exhibit II-10

ORACLE CASE VS. KNOWLEDGEWARE

	Oracle	KnowledgeWare
Long term viability of vendor	1.8	1.9
Product integration (future)	1.9	1.6
Methodology support by product	1.9	2.6
Current product features/ functions	2.1	1.6
Future product features/ functions	2.1	n/a
Product integration (current)	2.2	2.1
Consulting/implementation assistance supplied by product vendor	2.2	2.8
Vendor Reputation	2.3	2.1
References from current users	2.4	2.4
Conformance to other standards	2.4	n/a
Training offered by vendor	2.5	2.3
Ease of use	2.5	2.3
Effectiveness of sales process	2.5	n/a
Ease of learning product	2.6	2.4
Price	2.9	2.8
Conformance to AD/Cycle	3.3	2.6
Consulting/implementation assistance available from other vendors	3.4	3.3

1 = excellent, 5 = poor
Meaningful differences are 0.5 or larger

Exhibit II-11

KEY COMPONENTS OF A SUCCESSFUL CASE OFFERING (AS VIEWED BY ORACLE CASE USERS)

<u>Components Cited</u>

Cost (Price) (2)

Downsizing

Ease of Use

Modularized (2)

Open architecture
Integrated with data base

Methodology/design (2)

Training

Documentation

Code generator

Flexibility

Change control

Support

EXTENT TO WHICH ORACLE MEASURES UP:

	Percent of Respondents
Meets Component Requirements	59
Does Not Meet Requirements	23
Don't Know	18
	100

Exhibit II-12

ORACLE CASE STRENGTHS & WEAKNESSES (AS VIEWED BY ORACLE CASE USERS)

Strengths	Weaknesses
Ease of use	CPU resources
Documentation	Cost
Integrated methodology	Ease of use
Good representation	Documentation
Graphics & interface	Code generator
User extension	Project management/ planning
Competitive	Re-engineering
Multiple platform support	

Responses to open-ended questions

Exhibit II-13

IS ORACLE PRIORITIZING ITS CASE PRODUCTS APPROPRIATELY RELATIVE TO OTHER ORACLE PRODUCTS? (ORACLE CASE USERS)

	Percent of Respondents
Yes	69
No	5
Don't Know	26
	100

Quotes (Illustrative)

"Impressed by new release"

"New release should have been sooner"

"Overall, see improvement"

"Not sure if process is planned"

"Have to start somewhere"

"Things coming out are what we need"

Exhibit II-14

CONFIDENCE IN ORACLE'S ABILITY TO MEET ITS DELIVERABLES SCHEDULE (RATED BY ORACLE CASE USERS)

Overall rating of 2.9

(1= very confident, 5= no confidence)

Ratings tend to be toward extremes

Rating	Percent of Respondents
1	17
2	28
3	11
4	33
5	11

Both high and low raters cited their prior experiences as basis for rating.

III. ORACLE DATA BASE CUSTOMERS

This section examines the same sets of issues as they pertain the Oracle data base users who are not also Oracle CASE customers. Typically, these firms are using and/or evaluating other CASE products.

A. GENERAL CASE ISSUES

These organizations tend to be low intensity users of CASE products to date, with the average CASE product expenditure of under $5,000 (Exhibit III-1).

- This compares to equivalent spending levels of approximately ten times that amount for Oracle CASE customers. This point should not be over-stressed, since by definition Oracle CASE customers tend to be further along the CASE usage continuum than Oracle data base customers generally.

- Future spending plans, however, put this group much closer to the Oracle CASE group, although there is still some gap in spending. (See Exhibit II-1 for Oracle CASE spending plans.)

The payoff expected from CASE (Exhibit III-2) is similar to that found for Oracle CASE users:

- Again, about one-third do not expect any immediate payoff.

- Longer term, there is the same expectations for a mixture of benefits from quality, speed, maintenance and productivity.

When looking at specific CASE product capabilities (Exhibit III-3), this group places as much emphasis on integration with a relational data base as do the Oracle CASE customers. This should be very positive from the standpoint of future Oracle CASE sales to this group. Other levels of need are below that found for the Oracle CASE group; this is not unexpected, given the lower level of CASE investment by this group.

One indication as to why this group has not made much CASE investment is their assessment of CASE product deficiencies (Exhibit III-4). Here there is an important variance from the findings for the Oracle CASE group:

- Over 40% of the Oracle CASE customers interviewed could not cite a CASE product deficiency. This was true for only 14% of this group.
- On the other hand over 40% of this group sees the lack of integration as being a serious problem for CASE products (compared to one-fifth of Oracle CASE customers). This percentage, by the way, is much closer to the proportion that INPUT has found when interviewing customer sets of other CASE vendors.
- One conclusion is that until this group of Oracle data base users have their concerns in this area addressed that they will not be making significant CASE commitments.

Unlike the typical Oracle CASE customer, who did not consider many other vendors, this group has already examined many CASE vendors, although no one vendor has been looked at by more than one-quarter of respondents (Exhibit III-5).

B. ORACLE CASE ISSUES

INPUT's interviews did not uncover negative views on Oracle CASE. However, half of the respondents felt they did not know enough about Oracle CASE to comment on it (Exhibit III-6). INPUT believes that this is an important, actionable item by Oracle, given that this group also places such importance on integration with a relational data base.

Most of the respondents had conducted a CASE product selection process or were in the process of conducting or planning for such an evaluation process. The factors considered or being considered were generally similar to those used by Oracle CASE customers (Exhibit III-7).

- Compatibility was still the most important issue, although less important than for the Oracle CASE customers (see Exhibit II-8 for the Oracle CASE customer factors).
- Process improvement was not, however, cited by this group. This issue may need more research. It may be that this factor is valued more by firms that have completed the research and analysis for tool selection.

These respondents rated the other CASE product vendors which they had knowledge of, as shown in Exhibit III-8. These ratings are generally not distinguished, especially if compared to the ratings made of Oracle CASE (Exhibit III-9). [Note: Few of the Oracle data base customers had enough detailed information on Oracle CASE to make this kind of rating.]

There was somewhat more consensus on what the key components for a successful CASE offering consist of among this group than among Oracle CASE customers. There was more clustering around integration and support for multiple platforms/openness (Exhibit III-10). However, half of the respondents could not say how Oracle measured up. Over one-third thought that Oracle did not measure up or did so only partially. [Note: There were not enough comments on Oracle CASE's strengths and weaknesses for useful observations to be made.]

A similar pattern of lack of knowledge is shown when examining this group's assessment of whether Oracle is prioritizing its CASE products appropriately relative to other Oracle products (Exhibit III-11): Half the respondents did not know enough to make a judgment. Of those that did, a majority believed that Oracle's priorities were correct.

Oracle data base customers gave Oracle a medium rating on their confidence of Oracle's ability to meet its Oracle CASE deliverables schedule (Exhibit III-12). This rating is very similar to that given by Oracle CASE customers. As noted earlier, this rating may reflect a blending of opinion of Oracle CASE and Oracle's other products.

C. SUMMARY

This group should represent good prospects for the Oracle CASE product:

- There is a relatively low amount of investment already made, with some additional investment already planned for.
- These customers place a high value on integration with a relational data base.
- Other CASE products, either in use or being considered, do not receive very high ratings.

However, the current level of knowledge of Oracle CASE is relatively low among this group. The relatively low amount of the likely average sale may be a barrier to effectively marketing to this group, as the situation now exists.

Exhibit III-1

CASE PRODUCT INVESTMENT BY ORACLE DATA BASE USERS

	Mean	Median	Range
Average to Date	Under $5,000	Under $5,000	0-$10,000
Average Planned over Next Two Years	$40,000	$25,000	0 to $100,000

Exhibit III-2

PAYOFF EXPECTED FROM CASE: ORACLE DATA BASE USERS

	Percent of Respondents	
Payoff	Short Term	Long Term
Improved Quality	14	29
Increased Speed	14	21
Improved Maintenance	0	21
Productivity/Cost Savings	7	14
Improved Documentation	21	14
Other (e.g. standards, knowledge, control)	14	21
None expected	29	0

Multiple responses; totals more than 100%
Open-ended question; coded

Exhibit III-3

IMPORTANCE OF CASE PRODUCT CAPABILITIES: RATED BY ORACLE DATA BASE USERS

Capability	Rating*
Integration with Relational DBMS	1.3
Support for Multiple Hardware Platforms	2.0
Intergrated Re-engineering	2.4
Object-Oriented Design	2.6
Client/Server - Target Platform	2.7
Client/Server - Development Platform	2.9

1= Very Important, 5= Not Important at All
Meaningful differences are those 0.5 and larger

Exhibit III-4

CASE PRODUCT DEFICIENCIES (NON-VENDOR SPECIFIC) AS SEEN BY ORACLE DATA BASE USERS

Deficiency	Percent of Respondents
None cited	14
Integration	43
Product features (front end, back end)	21
Ease of Use	21

Open-ended question; coded
Multiple responses; total more than 100%

Exhibit III-5

OTHER VENDORS CONSIDERED OR USED BY ORACLE DATA BASE USERS

Vendor	Percent of Respondents
KnowledgeWare	22
Texas Instruments	14
Index	14
Lansa	14
Synon	14
Others	50
None considered	7

Multiple responses, totals more than 100%

Exhibit III-6

OPINIONS ON ORACLE'S CASE PRODUCTS (ORACLE DATA BASE USERS)

Opinion	Percent of Respondents
Positive	43
Negative	0
Mixed	7
Don't Know	50
	100

Quotes (Illustrative)

"Likes them"

"Impressive"

"Acceptable"

"Like rest of pack"

The leaders"

Step in right direction"

Open-ended question; coded

Exhibit III-7

FACTORS CONSIDERED IN PRODUCT SELECTION PROCESS: ORACLE DATA BASE USERS

Factor	Percent of Respondents
Compatibility	36
Tool Functionality	28
Cost	7
Ease of Use	7
Don't know (consultant selected, free copy)	21

Multiple responses; totals more than 100%
Open-ended question; coded

Exhibit III-8

ORACLE DATA BASE USERS' RATINGS ON NON-ORACLE CASE PRODUCTS

	Rating
Methodology support by product	2.5
Future product features/functions	2.7
Conformance to AD/Cycle	2.7
Vendor reputation	2.7
Conformance to other standards	2.9
Current product features/functions	2.9
Ease of use	2.9
References from current users	3.0
Long term viability of vendor	3.0
Product integration (future)	3.1
Training offered by vendor	3.2
Price	3.2
Ease of learning product	3.3
Product integration (current)	3.3
Consulting/implementation assistance supplied by product vendor	3.5
Consulting/implementation assistance available from other vendors	3.5
Effectiveness of sales process	3.6

1 = excellent, 5 = poor
Meaningful differences are 0.5 or larger

Exhibit III-9

ORACLE DATA BASE USERS' RATINGS ON NON-ORACLE CASE PRODUCTS

	Oracle CASE Users	Non-Oracle CASE Products
Long term viability of vendor	1.8	3.0
Methodology support by product	1.9	2.5
Product integration (future)	1.9	3.1
Future product features/ functions	2.1	2.7
Current product features/ functions	2.1	2.9
Product integration (current)	2.2	3.3
Consulting/implementation assistance supplied by product vendor	2.2	3.5
Vendor reputation	2.3	2.7
References from current users	2.4	3.0
Conformance to other standards	2.4	2.9
Training offered by vendor	2.5	3.2
Ease of use	2.5	2.9
Effectiveness of sales process	2.5	3.6
Ease of learning product	2.6	3.3
Price	2.9	3.2
Conformance to AD/Cycle	3.3	2.7
Consulting/implementation assistance available from other vendors	3.4	3.5

1 = Excellent, 5 = Poor
Meaningful differences are 0.5 or larger

Exhibit III-10

KEY COMPONENTS OF A SUCCESSFUL CASE OFFERING (AS VIEWED BY ORACLE DATA BASE USERS)

Components Cited (Number of times in parentheses)

Full Features (2)

Multiple Platform (2)

Integration (3)

Ease of Use

Open (2)

Supports Analysis

Price/Performance

Price (2)

Ease of Learning

EXTENT TO WHICH ORACLE MEASURES UP:

	Percent of Respondents
Meets Component Requirements	14
Meets Requirements Partially	22
Does Not Meet Requirements	14
Don't Know	50
	100

Exhibit III-11

IS ORACLE PRIORITIZING ITS CASE PRODUCTS APPROPRIATELY RELATIVE TO OTHER ORACLE PRODUCTS? (ORACLE DATA BASE USERS)

	Percent of Respondents
Yes	36
No	14
Don't Know	50
	100

Quotes (Illustrative)

"Improvements have been made"

"Good sales process"

"Making an effort"

"Not enough product for fully trained user"

"Leading edge - always coming out with something new

"Marketing point of view - don't respond to product shortcomings"

Exhibit III-12

CONFIDENCE IN ORACLE'S ABILITY TO MEET ITS DELIVERABLES SCHEDULE (RATED BY ORACLE DATA BASE USERS)

Overall rating of 3.0

Ratings had less tendency to be toward extremes than Oracle CASE users

Rating	Percent of Respondents
1	9
2	27
3	36
4	9
5	18

Both high and low raters cited their prior experiences as basis for rating.

1= very confident, 5= no confidence

IV. PROFESSIONAL SERVICE FIRMS/SYSTEMS INTEGRATORS

In this chapter the views and plans of professional service firms/systems integrators are reported on. For the sake of brevity, these firms will be referred to as "SI firms".

A. GENERAL CASE ISSUES

Some SI firms are very large investors in CASE technology. Exhibit IV-1 shows that there are very wide variations in investment:

- A few firms have made a very significant internal commitment to bought-in CASE technology.
- However, the bulk of SI firms, as shown in the median sized investment, tend not to make CASE investments themselves, but go in whatever directions their customers select.

SI firms also have a different profile from the typical user organization in what they expect to gain from CASE technology.

- As shown in Exhibit IV-2 SI firms are looking primarily to increase the speed at which they can field applications for their customers.
- Quality is also a concern. A unique reason for SI firms utilizing CASE is to improve their competitive position by being able to compete in situations where a customer or prospect values CASE technology.

The general pattern of CASE product capabilities looked for by SI firms is similar to that looked for by user organizations (Exhibit IV-3).

- SI firms place somewhat less value than Oracle CASE users on integration with a relational DBMS, but still quite an important emphasis.
- Both types of client/server capabilities are quite important.
- Integrated re-engineering and object-oriented design are least important, but still within the general range of need expressed by user organizations.

SI firms place a high value on integration (Exhibit IV-4). As noted earlier, this is higher than Oracle CASE users but close to the importance placed on integration by CASE users generally. Of special note to Oracle, SI firms also find tools which are oriented toward proprietary platforms a problem; in some cases, these firms would view Oracle CASE as being a proprietary platform, albeit a software platform.

Not surprisingly, SI vendors have been exposed to or examined a large number of CASE products. Exhibit IV-5 is probably not exhaustive for the firms involved, but provides a reasonable picture of the range of their interests.

- KnowledgeWare reflects its market dominance.
- However, note that almost all firms have looked at a variety of products, usually in conjunction with customer work. [Note: Oracle was volunteered once by these firms, prior to the part of the interview where the INPUT interviewer brought up Oracle.]

B. ORACLE CASE ISSUES

The majority of SI firms answered "don't know" when requested an opinion on Oracle CASE (Exhibit IV-6).
This is not surprising given Oracle CASE's relatively low visibility in the overall marketplace (based on more general studies that INPUT has conducted).

SI firms place high importance on tool functions when selecting CASE products (Exhibit IV-7), and less emphasis on compatibility. In general, INPUT would observe that SI firms have more definite opinions on CASE tool requirements than the typical user organization.

Exhibit IV-8 is a composite rating of non-Oracle CASE products. The ratings illustrate that the SI firms are not
overly enamored with the products they have been exposed to. This means that there is a potential opportunity for an "outsider" like Oracle CASE to obtain mindshare, especially now that the CASE shakeout is in full swing.

For comparison, the SI firms' ratings are compared to those previously made by Oracle CASE users (Exhibit IV-9). The differences are generally striking, and always in Oracle CASE's favor.

SI firms are closer to a consensus on the components of a successful CASE offering than Oracle CASE customers (Exhibit IV-10): Openness and integration, to use just two words. SI firms find it difficult to make meaningful statements as to how well Oracle CASE meets these requirements.

Similarly, SI firms cannot be helpful in judging the prioritization of Oracle's CASE products (Exhibit IV-11).

SI firms give Oracle a lower rating in confidence to meet deliverables schedules (Exhibit IV-12). Given the SI firms' lack of knowledge of Oracle CASE, their ratings are based even more than other groups on prior knowledge of Oracle's other products.

Exhibit IV-1:

CASE PRODUCT INVESTMENT BY SYSTEMS INTEGRATORS

	Mean	Median	Range
Average to Date	$2,500,000	$10,000	0-$10,000,000
Average Planned over Next Two Years	$4,000,000	$50,000	0-$20,000,000

Exhibit IV-2

PAYOFF EXPECTED FROM CASE: SYSTEMS INTEGRATORS

Payoff	Percent of Respondents Short Term	Long Term
Improved Quality	30	30
Increased Speed	50	50
Improved Maintenance	0	0
Productivity/Cost Savings	10	10
Improved competitive position	20	20
Improved Documentation	20	20
Other (e.g. analysis, repository, integration)	5	5
None expected	0	0

Multiple responses; totals more than 100%
Open-ended question; coded

Exhibit IV-3

IMPORTANCE OF CASE PRODUCT CAPABILITIES: RATED BY SYSTEMS INTEGRATORS

Capability	Rating
Integration with Relational DBMS	1.8
Client/Server - Development Platform	1.8
Client/Server -Target Platform	1.9
Support for multiple hardware platforms	2.1
Object-oriented Design	2.5
Integrated re-engineering	2.7

1= Very Important 5= Not Important at All

Meaningful differences are those 0.5 and larger

Exhibit IV-4

CASE PRODUCT DEFICIENCIES (NON-VENDOR SPECIFIC) AS SEEN BY SYSTEMS INTEGRATORS

Deficiency	Percent of Respondents
Integration	50
None Cited	30
Product features (front end, back end)	20
Proprietary platforms	20

Open-ended question; coded
Multiple responses; total more than 100%

Exhibit IV-5

OTHER VENDORS CONSIDERED OR USED BY SYSTEMS INTEGRATORS

Vendor	Percent of Respondents
KnowledgeWare	50
Index	30
Texas Instruments	20
Deft	20
Bachman	20
Others	80

Multiple responses; totals more than 100%

Exhibit IV-6

OPINIONS ON ORACLE'S CASE PRODUCTS (SYSTEMS INTEGRATORS)

Opinion	Percent of Respondents
Positive	20
Negative	0
Mixed	20
Don't Know	60
	100

Quotes (Illustrative)

"Pretty good"

"Too early"

"Pretty invisible"

"OK"

Open-ended question; coded

Exhibit IV-7

FACTORS CONSIDERED IN PRODUCT SELECTION PROCESS: SYSTEMS INTEGRATORS

Factor	Percent of Respondents
Compatibility	30
Tool Functionality	60
Market Acceptance	20
Cost	20
Ease of Use	10

Multiple responses; totals more than 100%
Open-ended question; coded

Exhibit IV-8

SYSTEMS INTEGRATORS' RATINGS OF NON-ORACLE CASE PRODUCTS

	Rating
Conformance to other standards	2.0
Vendor reputation	2.3
Effectiveness of sales process	2.6
Long term viability of vendor	2.6
Consulting/implementation assistance supplied by product vendor	2.8
Current product features/ functions	3.0
Ease of use	3.0
Ease of learning product	3.0
Training offered by vendor	3.0
Product integration(future)	3.2
Methodology support by product	3.2
Product integration (current)	3.2
Refererences from current users	3.2
Future product features/ functions	3.5
Price	3.5
Consulting/implementation assistance available from other vendors	3.5
Conformance to AD/Cycle	3.7

1 = excellent, 5 = poor
Meaningful differences are 0.5 or larger

Exhibit IV-9

COMPARISON OF SYSTEMS INTEGRATORS' RATINGS TO ORACLE CASE USER RATINGS

	Oracle CASE Users	SI (Non-Oracle CASE)
Long term viability of vendor	1.8	2.6
Product integration (future)	1.9	3.2
Methodology support by product	1.9	3.2
Future product features/ functions	2.1	3.5
Current product features/ functions	2.1	3.0
Product integration (current)	2.2	3.2
Consulting/implementation assistance supplied by product vendor	2.2	2.8
Vendor reputation	2.3	2.3
References from current users	2.4	3.2
Conformance to other standards	2.4	2.0
Effectiveness of sales process	2.5	2.6
Ease of use	2.5	3.0
Training offered by vendor	2.5	3.0
Ease of learning product	2.6	3.0
Price	2.9	3.5
Conformance to AD/Cycle	3.3	3.7
Consulting/implementation assistance available from other vendors	3.4	3.5

1 = Excellent, 5 = Poor
Meaningful differences are 0.5 or larger

Exhibit IV-10

KEY COMPONENTS OF A SUCCESSFUL CASE OFFERING (AS VIEWED BY SYSTEMS INTEGRATORS)

Components Cited (Number of times mentioned)

Ease of Use

Open architecture(4)

Integrated (2)

Methodology, design

Flexibility

Change control

EXTENT TO WHICH ORACLE MEASURES UP:

	Percent of Respondents
Meets Component Requirements	0
Does Not Meet All Requirements	30
Does Not Meet Requirements	0
Don't Know	70
	100

Exhibit IV-11

IS ORACLE PRIORITIZING ITS CASE PRODUCTS APPROPRIATELY RELATIVE TO OTHER ORACLE PRODUCTS? (SYSTEMS INTEGRATORS)

	Percent of Respondents
Yes	30
No	10
Don't Know	60
	100

Exhibit IV-12

CONFIDENCE IN ORACLE'S ABILITY TO MEET ITS DELIVERABLES SCHEDULE (RATED BY SYSTEMS INTEGRATORS)

Overall rating of 3.7

Ratings were relatively clustered.

Rating	Percent of Respondents
1	0
2	17
3	33
4	17
5	33

Both high and low raters cited their prior experiences as basis for rating.

1 = very confident, 5 = no confidence

V. PRESS AND ANALYST ASSESSMENTS

A. COVERAGE AND INTERACTIONS WITH ORACLE

All except one of the press and analysts contacted had written on Oracle CASE at least once in the last year-and-a-half.

- Half had done so in the last six months

- Most of the writing had focussed on product introductions. Exceptions included the write-up of a briefing and an analysis of Oracle's CASE strategy.

All press/analysts rated their coverage as neutral to positive; in large part this rating appears to be because their own view of themselves and their writings is as objective analysts. Several phrased their response to the effect that if a product or company is good then the coverage is favorable.

Three-quarters of those interviewed had definite plans for future Oracle CASE coverage. Fifteen percent thought they might be covering Oracle CASE. Three quarters wanted Oracle to be involved in such coverage.

Exhibit V-1 summarizes the findings reported above.

Ninety percent of respondents who had attempted contact with Oracle had found Oracle responsive on Oracle CASE-related issues. (One volunteered that Oracle had been "too responsive", i.e., took up too much of his time.)

Eighty percent of respondents said they knew who to contact and over three-quarters said that they felt comfortable in calling Oracle when they had questions surrounding CASE products in general.

About forty percent of respondents stated that they sometimes felt dissuaded from contacting Oracle. The examples given concerned the difficulty which some of the respondents have had obtaining specific information.

Two-thirds of respondents stated that they were involved with or aware of speaking engagements involving CASE. However, only one-third stated that they would be interested in talking to an Oracle executive about presenting. This was not because they were unwilling to consider Oracle presenting, but because of the format of the conferences and/or because the respondent had no role in making such arrangements.

Exhibit V-2 summarizes the data on interactions with Oracle on CASE.

Oracle scores reasonable well in providing information to the press and analysts, as shown in Exhibit V-3. Oracle scores best in meeting their deadlines and providing access to key people and least well in openness.

B. COMPETITIVE AND MARKET ISSUES

Respondents were asked to name the top competitors to Oracle CASE in four categories (as shown in Exhibit V-4).

- Only KnowledgeWare, Intersolv and Texas Instruments were named more than six times.
- One conclusion to draw from this chart is that only the IBM mainframe category is really filled with competitors.
- The PC category may be one that is fading as a standalone category (as opposed to client/server technology)

Another, earlier open-ended question was asked on what CASE vendor(s) is capturing mindshare and receiving positive market coverage.

- Here, the response was different, with only TI receiving more than one "vote" (eight).
- Others named included KnowledgeWare, Cadre, IDE, Andersen and Intersolv.
- One comment is that TI excites the most intense levels of support in the user community, but this support is relatively narrow, almost a "religious" kind of attitude.

The press/analysts were asked to rate CASE vendors in six marketing and product areas. While none of the vendors received enough ratings to be statistically valid, several intuitively acceptable points emerged (Exhibit V-5):

- Oracle and KnowledgeWare received roughly equivalent ratings, with KnowledgeWare higher in marketing ability and lower in product quality and credibility. However, KnowledgeWare was given a somewhat higher rating in market perception. These relative positions seem about right in INPUT's opinion.

- Texas Instruments scores about as well in marketing and product but better in the other categories. INPUT believes that these ratings are correct as far as they go, but may not address some of the architectural issues that may prove to be TI's Achilles heel.

Respondents generally believed that it was very important to provide interfaces to AD/Cycle and Cohesion (Exhibit V-6). The only qualification was the extent to which AD/Cycle may not become a reality and, therefore, be much less important to interface with.

Generally speaking, the respondents did not see that any particular industry was more (or less) interested in CASE.

C. ORACLE CASE ISSUES

Opinion is generally quite positive on Oracle CASE (Exhibit V-7.

The press and analysts differ on the key components of CASE, like the other groups interviewed (Exhibit V-8), with integration being the most-cited component. Three-quarters of the respondents believed that Oracle CASE meet these requirements in whole or in part.

Oracle CASE's strengths and weaknesses (Exhibit V-9) touched on themes that were also explored when issues of differentiation, market advantages and "why choose Oracle CASE" came up: The Oracle data base platform is both a plus and a minus for Oracle CASE:

- The Oracle data base provides a unique advantage for Oracle CASE in that CASE users have ready access to many hardware and operating environments.
- This has come at the expense of providing complete openness and portability to other data base environments. To some, the Oracle environment could be viewed as constraining as, say, the MVS environment is to other software tools.

Over half of these respondents believe that Oracle is prioritizing its CASE products appropriately, relative to other Oracle products (Exhibit V-10). One quarter of respondents did not have an opinion.

The press/analysts gave Oracle CASE a 2.8 on a scale of 5 (1 = best) for its ability to meet its deliverables schedule. These ratings to cluster about this point, as opposed to some of the other groups.

Exhibit V-1

COVERAGE BY PRESS/ANALYSTS (SUMMARY)

Covered in last 18 months	83%
- Covered in last six months	62%
Rating of coverage	2 to 3
(1 = most favorable, 5 = least favorable)	(100%)
Planned Coverage	
- Definite	77%
- Possible	15%
- No (doesn't cover)	8%
Oracle involvement in coverage	75%

Exhibit V-2

INTERACTIONS WITH ORACLE

Interaction	Percent "yes"
Oracle responsive?	92%
Know who to contact?	83%
Comfortable calling Oracle?	83%
Ever dissuaded from contacting ORACLE?	42%
Respondent involved with/aware of CASE speaking engagements?	67%
Interest in involving Oracle executive in speaking engagement?	33%

Exhibit V-3

RESPONSIVENESS OF ORACLE VERSUS COMPETITION IN PROVIDING INFORMATION

(ACCORDING TO PRESS/ANALYSTS)

Provision of Information	Rating
Access to key Oracle people	2.0
Meeting press/analyst deadlines	2.3
Access to customers	2.4
Openness	2.7

1 = Very important 5 = Not important

Exhibit V-4

TOP COMPETITORS NAMED BY PRESS/ANALYSTS

	Number of Mentions		
Category	6 or more	2 - 5	1
IBM Mainframe	KnowledgeWare Intersolv Texas Instruments	Bachman CGI Andersen	
DEC		DEC TI Andersen Cognos	Sybase Cadre IDE Netron Cortex
UNIX		IDE Cadre TI Informix	DEC Sybase Andersen HP
PC		Intersolv	KnowledgeWare TI CGI

Exhibit V-5

RATING OF ORACLE, KNOWLEDGEWARE, AND TEXAS INSTRUMENTS (BY PRESS/ANALYSTS)

	Vendor		
Factor	Oracle	KnowledgeWare	TI
Product Quality	2.4	3.2	2.0
Marketing Ability	2.6	1.6	2.4
Support Capability	2.7	3.0	2.4
Credibility	3.2	4.0	1.5
Customer Perception	3.3	3.2	1.8
Market Perception	3.4	2.8	2.0

1 = Very good 5 = Poor

NOTE: These are drawn from samples too small to be statistically valid. However, the ratings are very suggestive.

Exhibit V-6

IMPORTANCE OF PROVIDING INTERFACE TO AD/CYCLE & COHESION

(ACCORDING TO PRESS/ANALYSTS)

Interface to	Importance
AD/Cycle	2.0
Cohension	1.5

1 = Very important 5 = Not important

Note: IBM rating would have been as high as DEC's if AD/Cycle had not lost credibility.

Exhibit V-7

OPINIONS ON ORACLE'S CASE PRODUCTS (PRESS/ANALYSTS)

Opinion	Percent of Respondents
Positive	59
Negative	8
Mixed	33
	100

Quotes (Illustrative)

"Good reputation"

"Reasonably solid"

"Good quality"

"Not true CASE--Point tools"

"Graphics good, forms OK"

"Tied too tightly to Oracle DB"

"Lower CASE very good; upper CASE weak"

Open-ended question; coded

Exhibit V-8

KEY COMPONENTS OF A SUCCESSFUL CASE OFFERING
(AS VIEWED BY PRESS/ANALYSTS)

Components Cited (Number of times cited)

Multiple Platform (2)

Integration (3)

Object-oriented

Delivery (2)

Graphical applications

Back-end components

Ease of Learning

Control over software engineering process

EXTENT TO WHICH ORACLE MEASURES UP:

	Percent of Respondents
Meets Component Requirements	42
Meets Requirements Partially	33
Does Not Meet Requirements	8
Don't Know	17
	100

Exhibit V-9

ORACLE CASE STRENGTHS & WEAKNESSES (AS VIEWED BY PRESS/ANALYSTS)

Strengths	Weaknesses
General move to CASE by Oracle customers	Product
Multiple hardware platform support	Not well-integrated tools
Oracle people	Integration
Oracle data base (as a foundation)	Enterprise-wide support
Broad line	Delivery
Cobol/4GL	Historic focus on data base
Data base users	Needs to be opened up (proprietary)
	Product holes
	Needs industry focus

Responses to open-ended questions

Exhibit V-10

IS ORACLE PRIORITIZING ITS CASE PRODUCTS APPROPRIATELY RELATIVE TO OTHER ORACLE PRODUCTS? (PRESS/ANALYSTS)

	Percent of Respondents
Yes	58
No	17
Don't Know	25
	100

Quotes (Illustrative)

"Logical"

"Consistent with recent trends to applications on data bases."

"Oracle should promote it more."

"CASE follows data base"

"Getting more emphasis now"

"Should get greater priority"

About INPUT

INPUT provides planning information, analysis, and recommendations for the information technology industries. Through market research, technology forecasting, and competitive analysis, INPUT supports client management in making informed decisions.

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